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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,995	01/28/2004	Yasuo Fukuda	CFA00046US	5020

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CANON U.S.A. INC. INTELLECTUAL PROPERTY DIVISION
15975 ALTON PARKWAY
IRVINE, CA 92618-3731

EXAMINER

ABDI, AMARA

ART UNIT	PAPER NUMBER
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2624

MAIL DATE	DELIVERY MODE
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08/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No.	Applicant(s)
	10/766,995	FUKUDA ET AL.
	Examiner	Art Unit
	Amara Abdi	2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 July 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,5,12,13 and 15-17 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,5,12,13 and 15-17 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 28 January 2004 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____. |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :01/28/2004
07/20/2005.

DETAILED ACTION

1. Applicant's response to the last office action, filed July 1, 2007 has been entered and made of record.
2. In view of the Applicant amendments, the objections to the claims 2-4,6-11, and 13-14 are expressly withdrawn.
3. In view of the Applicant amendments, the rejections of claims 5 and 13 under 35 U.S.C. §112 are expressly withdrawn.
4. Applicant's arguments with respect to claims 1,5,12,13, and 15-17 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1,12, and 15-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claims 1 and 12, "the setting means for setting a target highlight point and shadow target point" does not have any support from the specification, therefore it is considered as a new matter.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

8. Claim 17, line 2-3, recite the limitation "based on the representative luminance and the target luminance". There is insufficient antecedent basis for the limitation in the claim. The "representative luminance and the target luminance" were not introduced before. It is unclear if this limitation of the claim is intended to refer to "target highlight and a target shadow" on line 4 of claim 1. However, "the representative luminance and the target luminance" differs from the "the target highlight and the target shadow". It seems that the claim 17 should depend on claim 2 instead of claim 1.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1,5, and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuura (US 6,493,468) in view Akerib (US 6,460,127).

(1) Regarding claims 1 and 12:

Matsuura disclose an image processing device and method (column 1, line 65) (the image processing device is read as the image processing apparatus), comprising:

Calculating means for calculating a highlight point and a shadow point of an image from a histogram of the image (figure 4, column 5, line 5-7); setting means for setting a target highlight point and a target shadow point based on photographic information of the image (column 10, line 1-2, and column 10, line 12-13);

first generating means for generating a gradation correction based on the highlight point, the shadow point, the target highlight point and the target shadow point (column 9, line 19-22, and column 10, line 49-51).

Matsuura does not explicitly mention the detecting means for detecting a face region in the image; second generation means for generating an exposure correction based on a histogram of the face region; and correcting means for correcting the image based on the gradation correction and the exposure correction.

Akerib, in analogous environment, teaches an apparatus and method for signal processing, where detecting a face (column 67, line 9-10), (the recognition of a face is read as the same concept as the face detection), and generating an exposure correction (column 66, line 43) based on a histogram generation method (column 16, line 19-22), (the histogram generation method is read as the same concept as the histogram of the face region), and correcting the input image (column 66, line 44-46, And column 67, line 33-44), (the correcting of an image in television application is read as the same concept as the correcting of the input image).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Akerib, where generating a exposure

correction, in the system of Matsuura because such system is useful in variety of applications, such as digital or analogue camera, with or without special effects such as auto focus, gamma correction, and exposure correction (column 66, line 39-43).

(2) Regarding claims 5 and 13:

Matsuura disclose all the subject matter as described in claim 1 above.

Furthermore, Matsuura disclose an image processing device and method (column 1, line 65), (the image processing device is read as the image processing apparatus), where calculating a representative luminance (column 2, line 20-21) and setting a target luminance based on the representative luminance (column 2, line 23-24).

Matsuura does not explicitly mention the detecting means for detecting a face region in the image; generating an exposure correction and correcting the image.

Akerib, in analogous environment, teaches an apparatus and method for signal processing, where detecting a face (column 67, line 9-10), (the recognition of a face is read as the same concept as the face detection), generating an exposure correction (column 66, line 43) and correcting the input image (column 66, line 44-46, and column 67, line 33-44),

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Akerib, where detecting a face region in the image, in the system of Matsuura because such system is useful in variety of applications, such as digital or analogue camera, with or without special effects such as auto focus, gamma correction, and exposure correction (column 66, line 39-43).

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuura and Akerib, as applied to claim 1 above, and further in view of Enomoto (US-PGPUB 2002/0006230).

Matsuura and Kinjo disclose all the subject matter as described in claim 1 above.

Matsuura and Kinjo do not explicitly mention the image processing, where the photographic information includes a usage or non-usage of flash and a range of an in-focus position.

Enomoto, in analogous environment, teaches an image processing apparatus where the information includes the usage or non-usage of flash and the position of the main portion (paragraph [0063], line 5-13), (the position of the main portion is read as the focus position).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Enomoto, where the information includes the usage or non-usage of flash and the position of the main portion, in the system of Matsuura in order to output an image signal to reproduce a high quality image, and which output an image signal capable of reducing the appearance of a pseudo edge band caused when the ratio of dynamic range compression is high (paragraph [0021], line 9-12).

12. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuura and Akerib, as applied to claim 1 above, and further in view of Sato et al. (US 5,953,134).

Matsuura and Kinjo disclose all the subject matter as described in claim 1 above.

Matsuura and Kinjo do not explicitly mention the image processing, where rotating the image in accordance with the photographic information.

Sato et al., in analogous environment, teaches an image forming apparatus, where rotating the image in accordance with the photographic information (column 10, line 24-26).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Sato et al., where rotating the image, in the system of Matsuura in order to have an excellent in the stability and reliability of the quality of an image formed as well as the efficiency of the delivery of a recording sheet after the image transfer (column 4, line 37-40).

12. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuura and Akerib, as applied to claim 1 above, and further in view of Tanaka et al. (US 5,760,831).

Matsuura and Akerib disclose all the subject matter as described in claim 1 above.

Matsuura and Akerib do not explicitly mention the image processing method, where calculating a gamma value based on the representative luminance and the target luminance.

Tanaka et al., in analogous environment, teaches an image processing apparatus with white balance control, where calculating a gamma value based on the representative luminance and the target luminance (column 6, line 66-67, and column 7, line 1), (the representative luminance is read as R,G, and B, and the target luminance as the luminance signal).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Tanaka et al., where calculating the gamma value, in the system of Matsuura in order to provide a white balance control which can collect data without reducing a frame (column 2, line 10-12).

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amara Abdi whose telephone number is (571) 270-1670. The examiner can normally be reached on Monday through Friday 7:30 Am to 5:00 PM E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wu Jingge can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Amara Abdi
08/19/2007

JINGGE WU
SUPERVISORY PATENT EXAMINER

